Grade-Level Indicators Corresponding to the Iowa Tests for Grades 3-12

Reading Content Standard:

A. Students can comprehend what they read in a variety of literary and informational texts.

Grade 3 Indicators:

1. Understand stated information

2. Determine the meaning of new words from their context

3. Draw conclusions, make inferences, and deduce meaning

4. Infer traits, feelings, and motives of characters

5. Interpret information in new contexts

6. Interpret nonliteral language

7. Determine the main idea of a text

8. Identify the author's views or purpose

9. Analyze the style or structure of a text

Grade 4 Indicators:

1. Understand stated information

2. Determine the meaning of new words from their context

3. Draw conclusions, make inferences, and deduce meaning

4. Infer traits, feelings, and motives of characters

5. Interpret information in new contexts

6. Interpret nonliteral language

7. Determine the main idea of a text

8. Identify the author's views or purpose

9. Analyze the style or structure of a text

Grade 5 Indicators:

1. Understand stated information

2. Determine the meaning of new words from their context

3. Draw conclusions, make inferences, and deduce meaning

4. Infer traits, feelings, and motives of characters

5. Interpret information in new contexts

6. Interpret nonliteral language

7. Determine the main idea of a text

8. Identify the author's views or purpose

9. Analyze the style or structure of a text

Grade 6 Indicators:

1. Understand stated information

2. Determine the meaning of new words from their context

3. Draw conclusions, make inferences, and deduce meaning

4. Infer traits, feelings, and motives of characters

5. Interpret information in new contexts

6. Interpret nonliteral language

7. Determine the main idea of a text

8. Identify the author's views or purpose

9. Analyze the style or structure of a text

Grade 7 Indicators:

1. Understand stated information

2. Determine the meaning of new words from their context

3. Draw conclusions, make inferences, and deduce meaning

4. Infer traits, feelings, and motives of characters

5. Interpret information in new contexts

6. Interpret nonliteral language

7. Determine the main idea of a text

8. Identify the author's views or purpose

9. Analyze the style or structure of a text

Grade 8 Indicators:

1. Understand stated information

2. Determine the meaning of new words from their context

3. Draw conclusions, make inferences, and deduce meaning

4. Infer traits, feelings, and motives of characters

5. Interpret information in new contexts

6. Interpret nonliteral language

7. Determine the main idea of a text

8. Identify the author's views or purpose

9. Analyze the style or structure of a text

Grade 9 Indicators:

1. Understand stated information

2. Determine the literal meaning of specific words

3. Draw conclusions and make inferences and generalizations

4. Infer traits, feelings, and motives of characters or individuals

5. Make predictions based on stated information

6. Interpret nonliteral language used in a text

7. Determine the main idea, topic, or theme

8. Identify the author's views or purposes

9. Distinguish among facts, opinions, and assumptions

10. Recognize aspects of a passage's style and structure and recognize literary techniques.

Grade 10 Indicators:

1. Understand stated information

2. Determine the literal meaning of specific words

3. Draw conclusions and make inferences and generalizations

4. Infer traits, feelings, and motives of characters or individuals

5. Make predictions based on stated information

6. Interpret nonliteral language used in a text

7. Determine the main idea, topic, or theme

8. Identify the author's views or purposes

9. Distinguish among facts, opinions, and assumptions

10. Recognize aspects of a passage's style and structure and recognize literary techniques.

Grade 11 Indicators:

1. Understand stated information

2. Determine the literal meaning of specific words

3. Draw conclusions and make inferences and generalizations

4. Infer traits, feelings, and motives of characters or individuals

5. Make predictions based on stated information

6. Interpret nonliteral language used in a text

7. Determine the main idea, topic, or theme

8. Identify the author's views or purposes

9. Distinguish among facts, opinions, and assumptions

10. Recognize aspects of a passage's style and structure and recognize literary techniques.

Grade 12 Indicators:

1. Understand stated information

2. Determine the literal meaning of specific words

3. Draw conclusions and make inferences and generalizations

4. Infer traits, feelings, and motives of characters or individuals

5. Make predictions based on stated information

6. Interpret nonliteral language used in a text

7. Determine the main idea, topic, or theme

8. Identify the author's views or purposes

9. Distinguish among facts, opinions, and assumptions

10. **Recognize aspects of a passage's style and structure and recognize literary techniques.**

Math Content Standards:

A. Students can understand and apply a variety of math concepts.

B. Students can understand and apply methods of estimation.

C. Students can solve a variety of math problems.

D. Students can interpret data presented in a variety of ways.

Grade 3 Indicators:

A. Students can understand and apply a variety of math concepts.

1. Represent, compare, and order numbers

2. Describe and apply properties of numbers

3. Classify numbers by divisibility

4. Demonstrate ways of performing operations

5. Use place value; write numbers in standard, expanded, and exponential form

6. Use and interpret operational and relational symbols

7. Solve equations and inequalities

8. Use variable expressions to model situations

9. Explore numerical patterns

10. Identify, classify, and compare geometric figures

11. Describe geometric properties, patterns, and relationships

12. Apply the concepts of perimeter, area, and volume

13. Measure length/distance, time, temperature, weight, mass, and volume

14. Estimate measurements with appropriate precision

15. Identify and use appropriate units of measurement

16. Apply probability concepts and counting rules

17. Understand and apply measures of central tendency and variability

B. Students can understand and apply methods of estimation.

1. Use standard rounding to estimate

2. Use order of magnitude to estimate

3. Use number sense to estimate

C. Students can solve a variety of math problems.

1. Solve single-step and multiple-step math problems

2. Identify extraneous or insufficient information in problems

3. Choose a method for solving a problem

D. Students can interpret data presented in a variety of ways.

1. Read amounts on scales of bar and line graphs

2. Locate amounts in specific cells of a table

3. Compare quantities to determine ranks, sums, or differences and to find ratios

4. Use tables and graphs to determine rates or identify trends, understand underlying or functional relationships, and generalize or draw conclusions

Grade 4 Indicators:

A. Students can understand and apply a variety of math concepts.

1. Represent, compare, and order numbers

2. Describe and apply properties of numbers

3. Classify numbers by divisibility

4. Demonstrate ways of performing operations

5. Use place value; write numbers in standard, expanded, and exponential form

6. Use and interpret operational and relational symbols

7. Solve equations and inequalities

8. Use variable expressions to model situations

9. Explore numerical patterns

10. Identify, classify, and compare geometric figures

11. Describe geometric properties, patterns, and relationships

12. Apply the concepts of perimeter, area, and volume

13. Measure length/distance, time, temperature, weight, mass, and volume

14. Estimate measurements with appropriate precision

15. Identify and use appropriate units of measurement

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Grade 5 Indicators:

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3. Classify numbers by divisibility

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6. Use and interpret operational and relational symbols

7. Solve equations and inequalities

8. Use variable expressions to model situations

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Grade 6 Indicators:

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2. Describe and apply properties of numbers

3. Classify numbers by divisibility

4. Demonstrate ways of performing operations

5. Use place value; write numbers in standard, expanded, and exponential form

6. Use and interpret operational and relational symbols

7. Solve equations and inequalities

8. Use variable expressions to model situations

9. Explore numerical patterns

10. Identify, classify, and compare geometric figures

11. Describe geometric properties, patterns, and relationships

12. Apply the concepts of perimeter, area, and volume

13. Measure length/distance, time, temperature, weight, mass, and volume

14. Estimate measurements with appropriate precision

15. Identify and use appropriate units of measurement

16. Apply probability concepts and counting rules

17. Understand and apply measures of central tendency and variability

B. Students can understand and apply methods of estimation.

    1. Use standard rounding to estimate

    2. Use order of magnitude to estimate

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A. Students can understand and apply a variety of math concepts.

    1. Represent, compare, and order numbers

    2. Describe and apply properties of numbers

    3. Classify numbers by divisibility

    4. Demonstrate ways of performing operations

    5. Use place value; write numbers in standard, expanded, and exponential form

6. Use and interpret operational and relational symbols

7. Solve equations and inequalities

8. Use variable expressions to model situations

9. Explore numerical patterns

10. Identify, classify, and compare geometric figures

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12. Apply the concepts of perimeter, area, and volume

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16. Apply probability concepts and counting rules

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B. **Students can understand and apply methods of estimation.**

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2. Locate amounts in specific cells of a table

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4. Use tables and graphs to determine rates or identify trends, understand underlying or functional relationships, and generalize or draw conclusions

Grade 8 Indicators:

A. Students can understand and apply a variety of math concepts.

1. Represent, compare, and order numbers

2. Describe and apply properties of numbers

3. Classify numbers by divisibility

4. Demonstrate ways of performing operations

5. Use place value; write numbers in standard, expanded, and exponential form

6. Use and interpret operational and relational symbols

7. Solve equations and inequalities

8. Use variable expressions to model situations

9. Explore numerical patterns

10. Identify, classify, and compare geometric figures

11. Describe geometric properties, patterns, and relationships

12. Apply the concepts of perimeter, area, and volume

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Grade 9 Indicators:

A. Students can understand and apply a variety of math concepts.

1. Understand and apply number properties and operations

2. Understand and apply concepts and procedures of algebra

3. Understand and apply concepts of geometry and measurement

4. Understand and apply concepts in probability and statistics

B. Students can understand and apply methods of estimation.

    1. Understand and apply concepts and procedures of standard rounding, order of magnitude, and number sense

    2. Evaluate reasonableness of solutions

C. Students can solve a variety of math problems.

    1. Solve math problems requiring multiple steps and operations

    2. Reason quantitatively

D. Students can interpret data presented in a variety of ways.

    1. Make inferences based on data presented in a variety of ways

    2. Interpret data from a variety of sources

Grade 10 Indicators:

A. Students can understand and apply a variety of math concepts.

    1. Understand and apply number properties and operations

    2. Understand and apply concepts and procedures of algebra

    3. Understand and apply concepts of geometry and measurement

    4. Understand and apply concepts in probability and statistics

B. Students can understand and apply methods of estimation.

    1. Understand and apply concepts and procedures of standard rounding, order of magnitude, and number sense

2. Evaluate reasonableness of solutions

C. Students can solve a variety of math problems.

1. Solve math problems requiring multiple steps and operations

2. Reason quantitatively

D. Students can interpret data presented in a variety of ways.

1. Make inferences based on data presented in a variety of ways

2. Interpret data from a variety of sources

Grade 11 Indicators:

A. Students can understand and apply a variety of math concepts.

1. Understand and apply number properties and operations

2. Understand and apply concepts and procedures of algebra

3. Understand and apply concepts of geometry and measurement

4. Understand and apply concepts in probability and statistics

B. Students can understand and apply methods of estimation.

1. Understand and apply concepts and procedures of standard rounding, order of magnitude, and number sense

2. Evaluate reasonableness of solutions

C. Students can solve a variety of math problems.

1. Solve math problems requiring multiple steps and operations

2. Reason quantitatively

D. Students can interpret data presented in a variety of ways.

1. Make inferences based on data presented in a variety of ways

2. Interpret data from a variety of sources

Grade 12 Indicators:

A. Students can understand and apply a variety of math concepts.

1. Understand and apply number properties and operations

2. Understand and apply concepts and procedures of algebra

3. Understand and apply concepts of geometry and measurement

4. Understand and apply concepts in probability and statistics

B. Students can understand and apply methods of estimation.

1. Understand and apply concepts and procedures of standard rounding, order of magnitude, and number sense

2. Evaluate reasonableness of solutions

C. Students can solve a variety of math problems.

1. Solve math problems requiring multiple steps and operations

2. Reason quantitatively

D. Students can interpret data presented in a variety of ways.

1. Make inferences based on data presented in a variety of ways

2. Interpret data from a variety of sources